

To: Interested Parties in the Deschutes River Watershed

From: Andrew Kolosseus, Department of Ecology,  
Water Cleanup and Technical Assistance Unit Supervisor

Date: June \_\_, 2018

Re: Deschutes River Total Maximum Daily Load (TMDL)

In 2015, the Department of Ecology (Ecology) completed a Total Maximum Daily Load (TMDL) for the Deschutes River, Percival Creek, and Budd Inlet Tributaries. This 2015 Deschutes River TMDL Plan is available on our [ [HYPERLINK "https://ecology.wa.gov/Water-Shorelines/Water-quality/Water-improvement/Total-Maximum-Daily-Load-process/Directory-of-improvement-projects/Deschutes-River-and-tributaries"](https://ecology.wa.gov/Water-Shorelines/Water-quality/Water-improvement/Total-Maximum-Daily-Load-process/Directory-of-improvement-projects/Deschutes-River-and-tributaries) ].

In June 2018, the Environmental Protection Agency (EPA) approved the sections of the TMDL Plan that relate to temperature impairments. Additionally, EPA disapproved sections related to bacteria, dissolved oxygen, fine sediment, and pH. According to the Clean Water Act, EPA now has 30 days to write a new TMDL Plan for these disapproved parameters. EPA's partial approval and partial disapproval letter is available at [ [HYPERLINK "http://www.XXXXXXXXXX.gov"](http://www.XXXXXXXXXX.gov) ]

**Commented [HM1]:** We are disapproving temperature for Huckleberry, Reichel, Tempo Lake Outlet, Ayer, and Unnamed Spring to Deschutes River because loadings were not developed for these waters.

Ecology stands behind the strong science and the implementation plan included in the original TMDL Plan submitted to EPA in 2015. The TMDL process began in 2003 and used water quality monitoring, computer models, and stakeholder input to develop the TMDL Plan. Our knowledgeable local partners worked with us for years to identify water quality problems, develop solutions, and review drafts of the TMDL Plan. As we understand them, EPA's disapprovals stem from legal – not scientific – concerns. The 2015 Deschutes River TMDL Plan determined necessary actions to bring waterbodies into compliance with the state water quality standards. The TMDL Plan identified:

**Commented [HM2]:** We do have some legal process concerns (like bacteria PN, missing TMDL allocations), but we also have scientific concerns (linkage analysis for sediment, nutrients for DO).

- Fecal coliform bacteria concentrations must be reduced during both the summer season and winter seasons, particularly during storm events. The highest reductions are needed in the small tributaries to Budd Inlet.
- Mature system potential riparian shade must be established and river channels restored throughout the watershed. Restoring riparian vegetation and channel conditions are projected to cool peak temperatures up to 6.9°C, increase minimum DO by 1 mg/L, and decrease maximum pH by 0.5 standard units (SU) under critical conditions.

These actions – and the others identified in the implementation plan of the TMDL Plan – are still needed to improve water quality in the watershed. No matter what action EPA takes, we encourage watershed partners to use the TMDL Plan as a resource for identifying, prioritizing, and focusing water quality improvement efforts.

EPA's approval of the temperature sections of the TMDL Plan turns the temperature-related elements (referred to as "allocations") into requirements. This includes:

- Loading capacity for temperature (pages 39-43).

- Wasteload allocations for temperature (pages 49-58). Ecology will therefore turn the temperature-related wasteload allocations into permit limits for facilities covered by a National Pollutant Discharge Elimination System (NPDES) permit.
- Load allocations for temperature (pages 61-64).
- Implementation plan components related to temperature (pages 101-131).

Implementation of the temperature requirements will simultaneously also lead to significant improvements in dissolved oxygen and pH.

For the remaining parameters that EPA is disapproving, EPA will likely reincorporate the state recommended allocations and implementation actions into the new federal TMDL plan. We encourage our watershed partners to engage with EPA as they write a new federal TMDL plan for the remaining parameters. In the meantime, we urge local businesses and government agencies in the watershed to implement all the actions identified in the state TMDL plan. Science tells us these specific actions will improve water quality, help meet water quality standards, and protect the beneficial aquatic life and recreation uses in the Deschutes River and tributaries.

In the meantime, Ecology is preparing a separate TMDL Plan to address low levels of dissolved oxygen in Budd Inlet. This TMDL effort is progressing, and it is independent of the Deschutes River TMDL. The Budd Inlet TMDL Plan will set limits on nitrogen and carbon entering Budd Inlet from the Deschutes River and other sources. (Science tells us that dissolved oxygen problems in the Deschutes River are caused by a lack of healthy riparian areas and to a much lesser extent phosphorous and low flow – not nitrogen and carbon.) Many implementation actions – such as keeping human, livestock, and pet waste out of the river – would reduce multiple problems and will help the Deschutes River and Budd Inlet.

**Commented [HM3]:** Maybe include a sentence that though the two are independent, Ecology and EPA plan to coordinate closely to make sure the TMDLs are complementary.

For questions on the Deschutes River TMDL, please contact \_\_\_\_\_ at 360-407-\_\_\_\_ or [ [HYPERLINK "mailto:andrew.kolosseus@ecy.wa.gov"](mailto:andrew.kolosseus@ecy.wa.gov) ]. For questions on the Budd Inlet TMDL, please contact Leanne Weiss at 360-407-0243 or [ [HYPERLINK "mailto:leanne.weiss@ecy.wa.gov"](mailto:leanne.weiss@ecy.wa.gov) ].